



**OAQ Process Information Application**  
**PI-19: SURFACE COATING AND PRINTING**  
**OPERATIONS**

State Form 52560 (2-06)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**IDEM – Office of Air Quality – Permits Branch**  
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Facsimile Number: (317) 232-6749  
[www.IN.gov/idem/air/permits/index.html](http://www.IN.gov/idem/air/permits/index.html)

**NOTES:**

- The purpose of this form is to obtain detailed information about the surface coating process. Complete one form for each coating operation (or group of identical coating operations).
- Detailed instructions for this form are available online at [www.in.gov/idem/air/permits/apps/instructions/pi19instructions.html](http://www.in.gov/idem/air/permits/apps/instructions/pi19instructions.html).
- All information submitted to IDEM will be made available to the public unless it is submitted under a claim of confidentiality. Claims of confidentiality must be made at the time the information is submitted to IDEM, and must follow the requirements set out in 326 IAC 17.1-4-1. Failure to follow these requirements exactly will result in your information becoming a public record, available for any one to inspect and photocopy.

**PART A: Surface Coating Operations**

Part A summarizes the surface coating process. If there are multiple coating operations that are identical in nature, capacity, and use, you may use one form to summarize the data for the identical coating operations units.

<b>1. Unit ID:</b>	
<b>2. Installation Date</b> (actual or anticipated):	
<b>3. Number of Identical Units:</b>	
<b>4. Application Method:</b>	<input type="checkbox"/> Dipping <input type="checkbox"/> Brushing <input type="checkbox"/> Roll-coating <input type="checkbox"/> Flow-coating <input type="checkbox"/> Spraying
<b>5. If spray application is used, further specify the coating application method below.</b>	
<input type="checkbox"/> Not Applicable <input type="checkbox"/> Air Atomization <input type="checkbox"/> Airless	
<input type="checkbox"/> Electrostatic Air Atomized <input type="checkbox"/> Electrostatic Airless <input type="checkbox"/> Electrostatic Disc	
<input type="checkbox"/> High Volume Low Pressure (HVLP) <input type="checkbox"/> Low Pressure Air Atomization <input type="checkbox"/> Other: (specify)	
<b>6. Number of Guns Used when coating:</b>	<input type="checkbox"/> Not Applicable
<b>7. Number of Guns Supported by the compressor:</b>	<input type="checkbox"/> Not Applicable
<b>8. Type of Product and Material Coated:</b>	
<b>9. Gallons of Coating Used per Unit Coated:</b>	
<b>10. Maximum Production Rate:</b> (specify units)	

**PART B: Summary of Printing Process**

Part B summarizes the printing process. If there are multiple printing operations that are identical in nature, capacity, and use, you may use one form to summarize the data for the identical printing operations units.

<b>11. Unit ID:</b>	
<b>12. Installation Date</b> (actual or anticipated):	
<b>13. Number of Identical Units:</b>	
<b>14. Press Type:</b>	<input type="checkbox"/> Flexographic <input type="checkbox"/> Heatset Lithographic <input type="checkbox"/> Non-Heatset Lithographic <input type="checkbox"/> Rotogravure <input type="checkbox"/> Other: (specify)
<b>15. Paper Feed Type:</b>	<input type="checkbox"/> Sheet <input type="checkbox"/> Web
<b>16. Maximum Line Speed:</b>	feet per minute (fpm)
<b>17. Maximum Printing Width:</b>	feet (ft)
<b>18. Ink Type:</b> (include MSDS)	

### PART C: Coating Data

Part C provides data about the coatings used in this process. **Complete this table once for each of the worst case coatings** and provide an MSDS for all of the coatings used in the process.

**19. Worst Case Coating:** *Indicate which of the worst case emissions scenario(s) that this coating represents.*

☐ Highest VOC Content

☐ Highest Single HAP Content

☐ Highest PM

☐ Highest Combined HAP Content

**20. Coating Manufacturer:**

**21. Material Identification:**

**22. Batch Identification:**

**23. Is the Coating Polymeric?**

☐ Yes

☐ No

**24. Is this a Multipart Coating?**

☐ Yes

☐ No

A. What are the parts?

B. What are the ratios of the parts?

C. What is the flash-off?

☐ 100% (default)

☐ Other (specify):

**25. Is the Coating Thinned or Diluted prior to application?**

☐ Yes

☐ No

A. What is the thinner?

B. What is the dilution ratio?

C. What is the flash-off?

☐ 100% (default)

☐ Other (specify):

**For the following items, provide as much of the data as is known about the coating.** The instructions for this form include the formulas needed for these calculations.

	A. As Supplied	B. As Applied
<b>26. Material Density (lbs/gal) (<math>D_C</math>)</b>		
<b>27. Weight % Total Volatiles (water and organics) (<math>W_V</math>)</b>		
<b>28. Weight % Water (<math>W_W</math>)</b>		
<b>29. Weight % Solids (<math>W_N</math>)</b>		
<b>30. Weight % VOC (<math>W_O</math>)</b>		
<b>31. Volume % Total Volatiles (water and organics) (<math>V_V</math>)</b>		
<b>32. Volume % Water (<math>V_W</math>)</b>		
<b>33. Volume % Solids (<math>V_N</math>)</b>		
<b>34. Volume % VOC (<math>V_O</math>)</b>		
<b>35. VOC Content, less water (lbs/gal) (VOC)</b>		
<b>36. Weighted Average Density of the Dilution Solvent (<math>D_D</math>)</b>	Not applicable	
<b>37. Dilution Solvent Ratio (<math>R_D</math>)</b>	Not applicable	

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### PART D: Emission Factors and Control Equipment

Part D identifies all emission factors used to calculate air emissions, as well as any control equipment or control technique for this process.

38. Air Pollutant:	39. Emission Factor		40. Source of Emission Factor (if not using AP-42, include calculations)
	value	units	
Particulate Matter (PM)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 10µm (PM <sub>10</sub> )			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Particulate Matter less than 2.5µm (PM <sub>2.5</sub> )			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Hazardous Air Pollutants (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Volatile Organic Compounds (VOC)			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A
Other (specify):			<input type="checkbox"/> AP-42 <input type="checkbox"/> Other <input type="checkbox"/> N/A

**41. Add-On Control Technology:** Identify all control technologies used for this unit, and attach completed CE-01 (unless "none").

- |   |  |
|---|--|
| <input type="checkbox"/> None                                     |  |
| <input type="checkbox"/> Baghouse / Fabric Filter – Attach CE-02. | <input type="checkbox"/> Absorption / Wet Collector / Scrubber – Attach CE-05. |
| <input type="checkbox"/> Oxidizer / Incinerator – Attach CE-06.   | <input type="checkbox"/> Adsorber – Attach CE-07.                              |
| <input type="checkbox"/> Condenser – Attach CE-08.                | <input type="checkbox"/> NO <sub>x</sub> Reduction – Attach CE-09.             |
| <input type="checkbox"/> Dry Filters – Attach CE-10.              | <input type="checkbox"/> Waterwash – Attach CE-10.                             |
| <input type="checkbox"/> Other (specify):                         | – Attach CE-10.  |

**42. Control Techniques:** Identify all control techniques used for this process.

**43. Process Limitations / Additional Information:** Identify any acceptable process limitations. Attach additional information if necessary.

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### PART E: Federal Rule Applicability

Part E identifies any federal rules that apply to the process.

<b>44. Is a <b>New Source Performance Standard (NSPS)</b> applicable to this source?</b> <i>If yes, attach a completed FED-01 for each rule that applies.</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>45. Unit ID:</b>
<input type="checkbox"/> 40 CFR Part 60, Subpart Kb	Volatile Organic Liquid Storage		
<input type="checkbox"/> 40 CFR Part 60, Subpart EE	Surface Coating of Metal Furniture		
<input type="checkbox"/> 40 CFR Part 60, Subpart MM	Auto and Light Duty Truck Surface Coating Operations		
<input type="checkbox"/> 40 CFR Part 60, Subpart QQ	Graphic Arts Industry: Publication Rotogravure Printing		
<input type="checkbox"/> 40 CFR Part 60, Subpart RR	Pressure Sensitive Tape and Label Surface Coating Operations		
<input type="checkbox"/> 40 CFR Part 60, Subpart SS	Industrial Surface Coating: Large Appliances		
<input type="checkbox"/> 40 CFR Part 60, Subpart TT	Metal Coil Surface Coating		
<input type="checkbox"/> 40 CFR Part 60, Subpart WW	Beverage Can Surface Coating Industry		
<input type="checkbox"/> 40 CFR Part 60, Subpart FFF	Flexible Vinyl and Urethane Coating and Printing		
<input type="checkbox"/> 40 CFR Part 60, Subpart SSS	Magnetic Tape Coating Facilities		
<input type="checkbox"/> 40 CFR Part 60, Subpart TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		
<input type="checkbox"/> 40 CFR Part 60, Subpart VVV	Polymeric Coating of Supporting Substrates Facilities		
<b>46. Is a <b>National Emission Standard for Hazardous Air Pollutants (NESHAP)</b> applicable to this source?</b> <i>If yes, attach a completed FED-01 for each rule that applies.</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	<b>47. Unit ID:</b>
<input type="checkbox"/> 40 CFR Part 63, Subpart GG	Aerospace		
<input type="checkbox"/> 40 CFR Part 63, Subpart IIII	Auto and Light Duty Truck Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart VVVV	Boat Manufacturing		
<input type="checkbox"/> 40 CFR Part 63, Subpart OOOO	Fabric Printing Coating and Dyeing		
<input type="checkbox"/> 40 CFR Part 63, Subpart NNNN	Large Appliances Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart EE	Magnetic Tape Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart KKKK	Metal Can Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart SSSS	Metal Coil Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart RRRR	Metal Furniture Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart MMMM	Miscellaneous Metal Parts and Products Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart JJJJ	Paper and Other Web Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart PPPP	Plastic Parts Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart KK	Printing and Publishing Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart WWWW	Reinforced Plastic Composites Production		
<input type="checkbox"/> 40 CFR Part 63, Subpart II	Ship Building and Ship Repair Surface Coating		
<input type="checkbox"/> 40 CFR Part 63, Subpart QQQQ	Wood Building Products		
<input type="checkbox"/> 40 CFR Part 63, Subpart JJ	Wood Furniture Surface Coating		
<b>48. Non-Applicability Determination:</b> <i>Provide an explanation if the process unit appears subject to a rule (based on the rule title or the source category), but the rule will not apply.</i>			